

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) Apparatus for forming a terminal on a battery, wherein the battery has a lid having a metal bush and a post connecting a group within the battery and located with its free end in the bush including:

a fusing device for fusing the post to the bush to form an assembly,

a mold having a cavity capable of receiving the assembly; and

means for allowing overfilling of the mold above a predetermined final fill level, and for controllably allowing contents of the overfilled mold to flow out so that the contents reach the predetermined final fill level of the mold.

2. (previously presented) Apparatus as claimed in Claim 1, wherein the means for overfilling comprises:

a feed channel adjacent the mold; and

a pump for pumping molten material into the cavity through the feed channel.

3. (previously presented) Apparatus as claimed in Claim 2, wherein the means for overfilling further comprises: a constant height structure defining the predetermined final fill

level, via which the molten material can be introduced into the mold.

4. (original) Apparatus as claimed in Claim 3 wherein the constant height structure is in communication with an inlet/outlet channel.

5. (original) Apparatus as claimed in Claim 4 wherein the inlet/outlet channel includes a valve for determining the height of molten material in the inlet/outlet channel relative to the constant height structure.

6. (currently amended) Apparatus as claimed in claim 1 wherein the cavity includes a constant height structure which is a weir.

7. (previously presented) Apparatus as claimed in Claim 6 wherein the weir is inclined downwardly in a direction of outflow of the contents of the overfilled mold from the cavity.

8. (previously presented) Apparatus as claimed in claim 1 further including a displacement body for introduction into the mold cavity to ensure that any excess material flows out of the mold.

9. (previously presented) Apparatus as claimed in claim 1 wherein the fusing device is a heatable probe for engaging and fusing the post and bush.

10. (original) Apparatus as claimed in Claim 9 wherein the tip of the probe is formed to engage the tip of the post.

11. (previously presented) Apparatus as claimed in

Claim 9 wherein the probe has a dependent skirt at its tip for melting at least part of the inner periphery of the bush.

12. (previously presented) Apparatus as claimed in claim 8 wherein the probe is mounted for movement into and out of the mold cavity.

13. (previously presented) Apparatus as claimed in Claim 12 wherein the probe constitutes the displacement body.

14. (previously presented) Apparatus as claimed in claim 9, further comprising at least one gas jet positioned to allow heating of the probe.

15. (previously presented) Apparatus as claimed in Claim 14 further including a control for increasing the strength of the gas jet when the probe is remote from the cavity after molding to surface treat the tip of the terminal and/or to displace any flashings from the terminal.

16. (previously presented) Apparatus as claimed in claim 3 wherein a part of the mold includes a thermal break adjacent between the constant height structure and the feed channel.

17. (currently amended) A method for forming a terminal on a battery wherein the battery has a lid having a metal bush and a post connected to a group within the battery and located with its free end in the bush comprising steps of:

providing a mold having an inlet/outlet;
fusing the post [[is]] to the bush; and

molding the terminal on the fused bush and post assembly in the mold encircling the assembly by initially overfilling the mold above a bottom level of the inlet/outlet with terminal forming material and subsequently allowing excess said terminal forming material to flow out of the mold via the inlet/outlet.

18. (previously presented) A method as claimed in Claim 17 wherein the post is fused to the bush whilst located in the mold.

19. (previously presented) A method as claimed in Claim 18 wherein the post and bush are fused by engagement by a heated probe introduced into the cavity of the mold.

20. (previously presented) A method as claimed in Claim 18 wherein the probe is withdrawn from the cavity during filling of the mold and subsequently dipped into the mold cavity to displace any remaining excess material.

21. (previously presented) A method as claimed in claim 17 wherein a jet of hot gas is played on the surface of the terminal, after the excess material has flowed out, to remove any flashings.

22. (previously presented) A method as claimed in claim 17 wherein heat is retained in area of the assembly whilst the terminal solidifies by providing a thermal break near the inlet/outlet.

23. (previously presented) A method as claimed in claim

17, comprising a further step of reheating the tip of the terminal as solidification occurs.

24. (canceled)